was 39% at a median follow-up of 12.1 months. Early significant postoperative complications occurred in 52% of patients. The graft-related mortality rate was 7%. The graft-related complication rate was 19%. During follow-up, there were two recurrences of aortic infection and two recurrences of allograft limb occlusion. Multivariate survival analysis identified age, chronic renal disease, prosthetic infection, emergent procedure, and coronary disease as independent predictors for postoperative mortality.

Conclusion: This experience with cryopreserved aortic allografts in aortic reconstructions shows an unsatisfactory 30-day survival rate, as well as a substantial early graft-related complication rate. Longer follow-up is needed in order to support the preferential use of cryopreserved allografts based on their long-term behavior.

Prognostic Impact of Arterial Stiffness in Patients with Symptomatic Peripheral Arterial Disease

Kals J., Lieberg J., Kampus P., Zagura M., Eha J., Zilmer M. Eur J Vasc Endovasc Surg 2014;48:310-7.

Objectives: Arterial stiffness (AS) is increasingly recognized as an independent risk factor in different high-risk populations. Whether changes in AS can predict prognosis in patients with symptomatic peripheral arterial disease (PAD) has never been investigated. The aim of the present study was to test the hypothesis that AS is an independent predictor of all-cause and cardiovascular disease (CVD) mortality in patients with symptomatic PAD.

Methods: A cohort of 117 symptomatic PAD patients (aged 62.3 ± 7.7 years) were prospectively recruited from the Department of Vascular Surgery, Tartu University Hospital, between 2002 and 2010. The AS was measured using pulse wave analysis and assessment of pulse wave velocity (PWV).

Results: During the follow-up period (mean 4.1 ± 2.2 years) there were 32 fatal events. Kaplan–Meier analysis showed that the probability of all-cause and CVD mortality decreased with increasing small artery elasticity (SAE), as estimated by the log-rank test ($p = .004$; $p = .005$, respectively). By contrast, large artery elasticity, augmentation index, and aortic and brachial PWV were not significantly related to mortality. In a Cox proportional hazard model, SAE above the median was associated with decreased all-cause and CVD mortality after adjustment for confounding factors: relative risk (RR), 0.37; 95% confidence interval (CI), 0.17–0.81; $p = .01$; RR, 0.11; 95% CI, 0.01–0.86; $p = .04$, respectively).

Conclusions: This study provides the first evidence, obtained from an observational study, that decreased small artery elasticity is an independent predictor of all-cause and CVD mortality in patients with symptomatic PAD.

Efficacy of Revascularization for Critical Limb Ischemia in Patients with End-stage Renal Disease

Yamamoto S., Hosaka A., Okamoto H., Shigematsu K., Miyata T., Watanabe T. Eur J Vasc Endovasc Surg 2014;48:318-26.

Objective: To evaluate the outcomes of surgical revascularization for critical limb ischemia in patients with end-stage renal disease (ESRD).

Patients and methods: From 2004 to 2010, 184 patients with 213 critically ischaemic limbs caused by arteriosclerosis were admitted to The University of Tokyo Hospital. The outcomes of primarily surgical revascularization-based treatments were retrospectively compared in patients with ESRD (ESRD group: 79 patients, 101 limbs) and without ESRD (non-ESRD group: 105 patients, 112 limbs) during the same period.

Results: Arterial reconstruction was performed on 56 limbs in 46 patients in the ESRD group and 78 limbs in 73 patients in the non-ESRD group (55% vs. 70%; $p = .03$). Major amputation was performed in 6 of 48 limbs with patent grafts in the ESRD group because of uncontrolled infection or progression of necrosis. The limb salvage rate after arterial reconstruction was significantly lower in the ESRD group than in the non-ESRD group ($p = .0019$). The postoperative survival rate was lower in the ESRD group than in the non-ESRD group, although this difference was not significant ($p = .052$). Associated cardiovascular disease and systemic infection were the most frequent causes of death in the ESRD group. There was no significant difference in graft patency between the two groups after distal bypass surgery; however, the limb salvage rate was significantly lower in the ESRD group than in the non-ESRD group ($p = .03$).

Conclusions: Critical limb ischemia associated with ESRD has a poor prognosis. Infection control is particularly important for achievement of good treatment outcomes.

The Effect of Deep Venous Stenting on Healing of Lower Limb Venous Ulcers

George R., Verma H., Ram B., Tripathi R. Eur J Vasc Endovasc Surg 2014;48:332-8.

Objective: To report the outcomes of endovascular interventions on deep veins in patients with venous ulcers (C6).

Methods: This was a retrospective review of a case series. All patients with active venous ulceration who underwent endovascular interventions to the deep venous system from February 2011 to June 2013 were included. Patients with C6 disease who failed a trial of adequate compression therapy or superficial vein interventions were considered for evaluation of the deep veins. Patients with deep vein reflux or without significant venous reflux or with a previous history of deep vein thrombosis underwent computed tomographic venogram or ascending venogram. In the absence of intravenous ultrasound trial ballooning to look for a "waist" to identify subtle lesions was used. Lesions were stented with long Nitinol stents.

Results: Thirty-eight patients underwent deep vein stenting of 44 limbs with venous ulcers. The lesions were considered to be post-thrombotic in 31 limbs and non-thrombotic iliac vein lesions in 13 limbs. A mean of 1.8 stents were used per patient. There were no significant complications associated with the interventions. At a median follow-up of 15 months, the primary and assisted primary patency rates were 94% and 97%, respectively. Sustained ulcer healing was achieved in 60% of limbs. A further 20% of ulcers had reduced in size. Recurrent ulcers developed in 13% of limbs, and half of these healed with interventions for newly developed incompetence in superficial veins.

Conclusion: Endovascular interventions to the deep veins appear to be an effective adjunct in achieving the healing of recalcitrant ulcers.